

# 2,5-Dimethylbenzophenone

<b>Other names:</b>	Methanone, (2,5-dimethylphenyl)phenyl- Benzophenone, 2,5-dimethyl-
<b>Inchi:</b>	InChI=1S/C15H14O/c1-11-8-9-12(2)14(10-11)15(16)13-6-4-3-5-7-13/h3-10H,1-2H3
<b>InchiKey:</b>	PJCBRWRFLHBSNH-UHFFFAOYSA-N
<b>Formula:</b>	C15H14O
<b>SMILES:</b>	<chem>Cc1ccc(C)c(C(=O)c2ccccc2)c1</chem>
<b>Mol. weight [g/mol]:</b>	210.27
<b>CAS:</b>	4044-60-4

## Physical Properties

Property code	Value	Unit	Source
gf	152.06	kJ/mol	Joback Method
hf	-15.39	kJ/mol	Joback Method
hfus	23.51	kJ/mol	Joback Method
hvap	61.61	kJ/mol	Joback Method
log10ws	-4.38		Crippen Method
logp	3.534		Crippen Method
mvol	176.260	ml/mol	McGowan Method
pc	2595.13	kPa	Joback Method
tb	659.79	K	Joback Method
tc	903.00	K	Joback Method
tf	386.62	K	Joback Method
vc	0.665	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	439.31	J/molxK	659.79	Joback Method
cpg	507.10	J/molxK	862.47	Joback Method
cpg	495.70	J/molxK	821.93	Joback Method
cpg	483.28	J/molxK	781.40	Joback Method
cpg	469.79	J/molxK	740.86	Joback Method
cpg	455.15	J/molxK	700.33	Joback Method
cpg	517.55	J/molxK	903.00	Joback Method

dvisc	0.0001701	Paxs	659.79	Joback Method
dvisc	0.0002113	Paxs	614.26	Joback Method
dvisc	0.0002719	Paxs	568.73	Joback Method
dvisc	0.0003655	Paxs	523.20	Joback Method
dvisc	0.0005197	Paxs	477.68	Joback Method
dvisc	0.0007961	Paxs	432.15	Joback Method
dvisc	0.0013483	Paxs	386.62	Joback Method

## Sources

<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C4044604&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C4044604&amp;Units=SI</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>dvisc:</b>	Dynamic viscosity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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